

Public Works  
CITY OF AUSTIN

AGENDA #30  
DATE: 4/20/2006

**RECOMMENDATION FOR  
COUNCIL ACTION**

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**Subject:** Authorize negotiation and execution of an amendment to the professional services agreement with TURNER, COLLIE AND BRADEN, INC., Austin, TX, for engineering services for the Davis Water Treatment Plant Process Improvement and Equipment Rehabilitation/Replacement Project in the amount of \$2,922,805 for a total contract amount not to exceed \$3,739,816.

**Amount and Source of Funding:** Funding in the amount of \$2,922,805 is included in the Fiscal Year 2005-2006 Capital Budget of the Austin Water Utility.

**Fiscal Note:** A fiscal note is attached.

**Requesting Department:**

**For More Information:**

**Prior Council Action:** A Professional Services Agreement with Turner, Collie and Braden, Inc. for the Davis Water Treatment Plant Process Improvement and Equipment Rehabilitation/Replacement Project in an amount not to exceed \$800,000 was approved on February 10, 2005.

**Boards and Commission Action:** Recommended by the Water and Wastewater Commission.

**MBE/WBE:** 9.87 % MBE and 25.75 % WBE subcontractor participation to date.

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The Davis Water Treatment Plant (WTP) has a design treatment capacity of 120 million gallons per day (MGD). The plant is a conventional lime softening design, with rapid mix basins, flocculation basins, sedimentation basins, gravity filters, clearwell storage, and raw water and finished-water pumping stations. Powdered activated carbon (PAC) is fed for taste and odor control and settled water pH is adjusted with carbon dioxide. This plant was constructed in 1954 and expanded in 1961 and 1973, with additional improvements in 1986, 1993, 1997, 2000, 2002 and 2003.

Due to the age of the Davis WTP, a series of projects are required to retrofit and upgrade the Plant to replace or rehabilitate failing equipment and provide process improvements to ensure continued firm treatment capacity and regulatory compliance. These types of facility retrofit projects require detailed preliminary engineering that evaluates existing conditions, considers available options, develops detailed cost estimates and recommends the most feasible and cost-effective improvements for construction. Especially for these type projects, the final design scope and the design and construction costs cannot be accurately determined until the preliminary engineering is complete.

The original Request For Qualifications (RFQ) for this project was issued requesting preliminary, design, construction and warranty phase services to result in a complete project. Turner, Collie and Braden, Inc. was selected to provide all engineering services to evaluate current processes and the condition of existing equipment, and recommend improvements and equipment replacements and / or rehabilitations for six main areas of the Plant. These areas include 1) raw water valves replacements / rehabilitations and modifications to the raw water header to improve reliability and flexibility, 2) rapid mix and distribution channel improvements to allow treatment flexibility and improved mixing, 3) sludge pumping modifications and sludge system improvements including improved flow and density / flow monitoring, 4) modifications to the Chemical Building area including to chemical feed systems and corrosion control, 5) improved recarbonation efficiency and 6) various process control modifications and numerous equipment replacements or rehabilitation items. The Preliminary Engineering Report specifically recommends necessary

improvements and modifications consistent with these six Plant areas.

The original Council authorization for this work provided for funding of services related to preliminary engineering and design services in the amount of \$800,000, with an anticipation to return to Council for additional funding to the selected firm for construction phase services in an estimated amount of \$400,000. However, the consultant has prepared a Preliminary Engineering Report (PER), which has been reviewed and approved by the Austin Water Utility, consistent with the scope of the originally issued RFQ that confirms significant process improvements and equipment replacements / rehabilitations required for the above-listed six identified areas. All of the recommended improvements are critical to maintain the Plant's reliability. The Austin Water Utility has prioritized the recommended improvements, replacements and rehabilitations into two categories: regulatory-driven and operationally most critical and 2) other critical improvements. In order to expedite completion of this work, Turner, Collie and Braden, Inc. has been authorized to proceed with design for the regulatory-driven and most critical components within the previously Council-authorized \$800,000 to be included in an initial construction contract. The construction and warranty phase engineering services requested herein for this initial construction contract totals approximately \$550,000.

However, because of the critical need to complete all improvements recommended in the approved PER, this request also seeks Council approval for additional design, construction and warranty phase services to complete a second construction contract through this authorization. Once approved, this request will allow for the negotiation and execution of a supplemental amendment to the Professional Services Agreement for the construction and warranty phase engineering services for an initial construction contract, and the design, construction and warranty phase engineering services to complete a second construction contract to result in a completed project for the improvements recommended in the PER. All services requested herein are within the scope of the original RFQ issued for the project.

# CIP FISCAL NOTE

DATE OF COUNCIL CONSIDERATION:  
WHERE ON AGENDA:  
DEPARTMENT:

04/20/06  
Resolution  
Austin Water Utility

**DESCRIPTION:**

Authorize negotiation and execution of an amendment to the professional services agreement with TURNER, COLLIE AND BRADEN, INC., Austin, TX, for engineering services for the Davis Water Treatment Plant Process Improvement and Equipment Rehabilitation/Replacement Project in the amount of \$2,922,805 for a total contract amount not to exceed \$3,739,816.

**FINANCIAL INFORMATION:**

Parent Project Name:	Water Unfunded Future
Project Authorization:	2005-06 Approved Capital Budget
Funding Source:	Commercial Paper
Number:	3960 227 1019
Current Appropriation	\$ 352,445,739.00
Unencumbered Balance	132,560,747.58 *
Amount of This Action	<u>(2,922,805.00)</u>
Remaining Balance	<u>\$ 129,637,942.58</u>
Current Available Balance	\$ 136,854,346.79
Less Outstanding Commitments	<u>(4,093,598.21)</u>
Estimated Unencumbered Balance	<u>\$ 132,560,747.58 *</u>

Utility Finance:



David Anders, Utilities Finance Manager

Date:

3/28/06

REF. # 3960 227 7143

No. 040506-E

**RECOMMEND AUTHORIZATION FOR NEGOTIATION AND EXECUTION OF AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH TURNER, COLLIE AND BRADEN, INC., (NON 60.12%), AUSTIN, TEXAS FOR ENGINEERING SERVICES FOR THE DAVIS WATER TREATMENT PLANT PROCESS IMPROVEMENT AND EQUIPMENT REHABILITATION/REPLACEMENT PROJECT IN THE AMOUNT OF \$2,922,805.00 FOR A TOTAL AMOUNT NOT TO EXCEED \$3,739,816.00.**

**April 5, 2006  
REGULAR MEETING  
VOTE: 6-0-2-1**

Motion made by: Warner  
Commissioners Consenting: Coleman, Lee, Gonzalez, Chan, Scott-Ryan  
Commissioners Dissenting:  
Commissioners Abstaining: Friese, and Raun  
Commissioners Absent: Pool

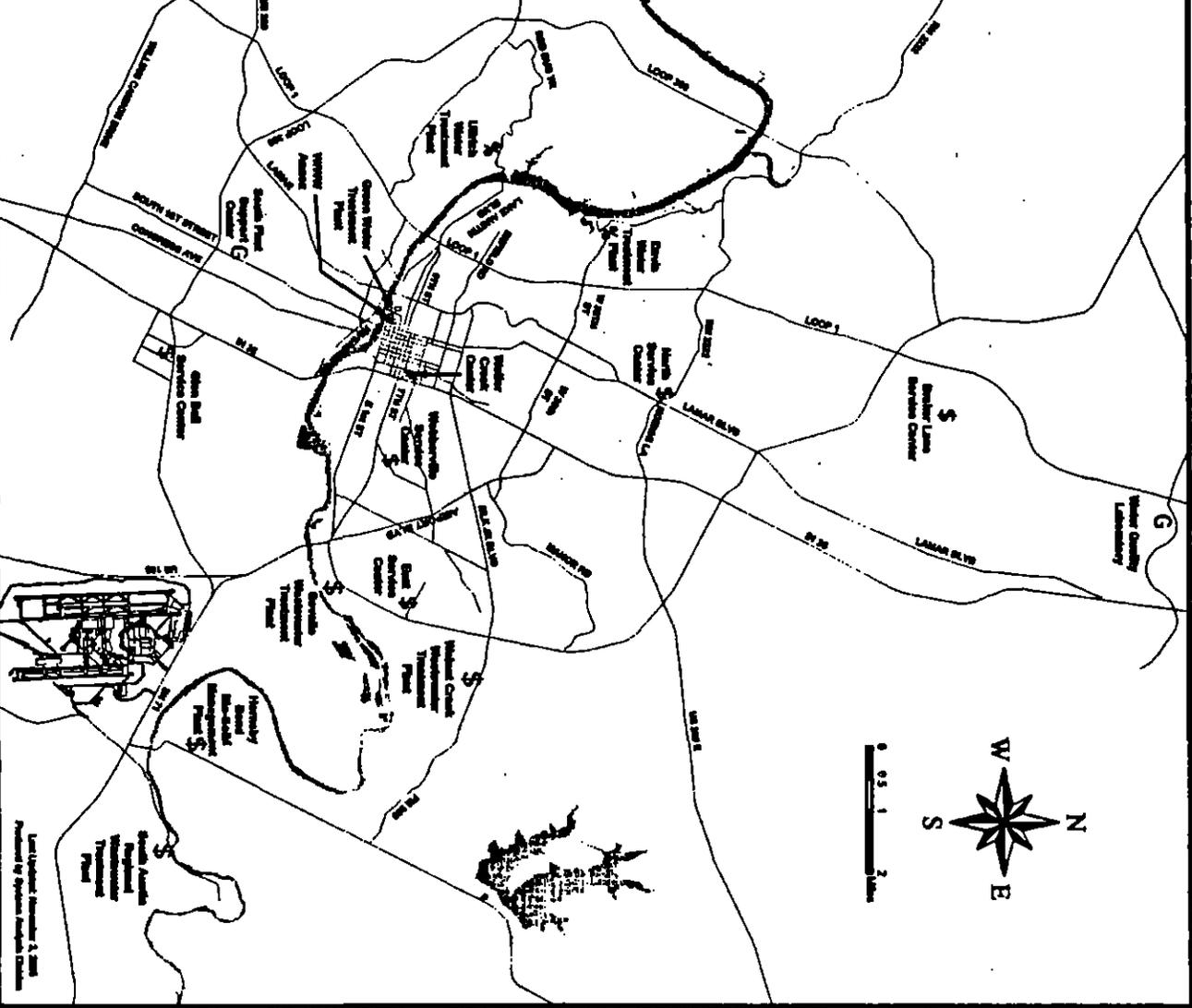
The Water and Wastewater Commission recommends authorization for negotiation and execution of an amendment to the professional services agreement with Turner, Collie and Braden, Inc., (NON 60.12%), Austin, Texas for engineering services for the Davis Water Treatment Plant Process Improvement and Equipment Rehabilitation/Replacement Project in the amount of \$2,922,805 for a total contract amount not to exceed \$3,739,816.00.

  
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Michael Warner, Chairperson  
Water and Wastewater Commission

  
\_\_\_\_\_  
Date

**City of Austin  
Austin Water Utility**

Drinker Lane Service Center	SE corner of Drinker & Burnet (Under Construction)	872-1880
Center for Environmental Research	2210 S. FM 873	872-1700
Daniel Water Treatment Plant	2620 W. John Street	872-1700
& Laboratory		872-1778
East Service Center	6101 Harold Court	872-4720
East Bell Service Center	3007 South Industrial Dr.	872-1110
Ornella Wastewater Treatment Plant	911 Linger Lane	365-3181
& Laboratory		365-7482
Green Water Treatment Plant	600 W. Caesar Chavez St.	872-1500
Herrity Sewer Disposal		
Management Plant	2210 S. FM 873	872-1880
North Service Center	801 West Koenig Lane	872-2800
Phosphate & Computer Recycling	625 East 10th Street	872-1570
South Austin Regional WW		
Treatment Plant	13628 Fossilwood Lane	872-4000
South First Support Center	3916 South 1st Street	872-6501
Ulrich Water Treatment Plant	1000 Forest View Drive	872-1800
Water Creek Center	625 East 10th Street	872-4101
Water Creek WW Treatment Plant	7115 East MLK Blvd.	872-4600
A Laboratory		872-1415
Water Quality Laboratory	14650 Burnet Dr., #121	872-1450
Wastewater Service Center	2900 Westborough Road	703-9800
Wastewater Compliance Division	3835 9th 820 South	283-4433



City of Austin, Texas  
Water Utility  
Map of Austin, Texas  
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Water Utility

**AUTHORIZATION HISTORY**

<b>AMOUNT</b>	<b>DATE</b>	<b>DESCRIPTION</b>
\$800,000.00	2/10/05 (Council)	Preliminary Engineering and Design Phase Services
\$17,011.00	2/13/06 (Administrative Authority)	Amendment for Design Phase Services
\$2,922,805.00	Proposed (Council)	Amendment for Additional Design and Bid Document Preparation, Bid, and Construction Phase Services
<b>\$3,739,816.00</b>	<b>Total Contract Authorization</b>	

**CONTRACT HISTORY**

<b>AMOUNT</b>	<b>DATE</b>	<b>DESCRIPTION</b>
\$327,430.00	5/31/05	Original Professional Services Agreement for Preliminary Design Services
\$489,581.00	2/13/06	SA #1 - Amendment for Design Services
\$2,922,805.00	Proposed	SA #2 - Amendment for Additional Design and Bid Document Preparation, Bid, and Construction Phase Services
<b>\$3,739,816.00</b>	<b>Total Contract Expenditures</b>	

Participation goals stated in the original approved compliance plan for the agreement were 1.7% African American (MB); 9.5% Hispanic (MH); 0% Native American (MN); 4.7% Asian American (MA); and 17.2% WBE. Participation for this amendment:

<b>NON M/WBE TOTAL - PRIME</b>	<b>\$1,757,273.00</b>	<b>60.12%</b>
Turner, Collie and Braden, Inc., Austin, Texas	\$1,757,273.00	60.12%
<b>MBE TOTAL - SUBCONSULTANTS</b>	<b>\$290,445.00</b>	<b>9.94%</b>
<b>African American Subtotal</b>	<b>\$98,400.00</b>	<b>3.37%</b>
Group Solutions RJW, Austin, TX (On site admin. assistance)	\$98,400.00	3.37%
<b>Hispanic Subtotal</b>	<b>\$147,310.00</b>	<b>5.04%</b>
Jose I. Guerra, Inc., Austin, TX (Structural engineering)	\$130,810.00	4.48%
Macias & Associates, Inc., Austin, TX (Surveying)	\$16,500.00	0.56%
<b>Asian American Subtotal</b>	<b>\$44,735.00</b>	<b>1.53%</b>
Encofech Eng., Inc., Austin, TX (Mechanical engineering)	\$44,735.00	1.53%
<b>WBE TOTAL - SUBCONTRACTORS</b>	<b>\$609,382.00</b>	<b>20.85%</b>
Marutunian Engineering, Inc., Austin, TX (Electrical engineering)	\$587,382.00	20.10%
Insan K. Booth, Consulting Eng., Austin, TX (Civil engineering)	\$22,000.00	0.75%
<b>NON M/WBE TOTAL - SUBCONTRACTORS</b>	<b>\$265,705.00</b>	<b>9.09%</b>
Carroll Engineers, P.C., Austin, TX (Civil engineering)	\$223,705.00	7.65%
CO2 Plant Maintenance, Dripping Springs, TX (Mechanical engineering)	\$42,000.00	1.44%

Overall participation for the entire project, including this amendment:

**PRIME:**

59.48% Non M/WBE.

**SUBCONSULTANTS:**

63% MB; 5.05% MH; 2.24% MA; 21.92% WBE; and 8.68% Non M/WBE.

**TOTAL:**

63% MB; 5.05% MH; 2.24% MA; 21.92% WBE; and 68.16% Non M/WBE.